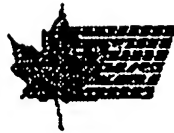


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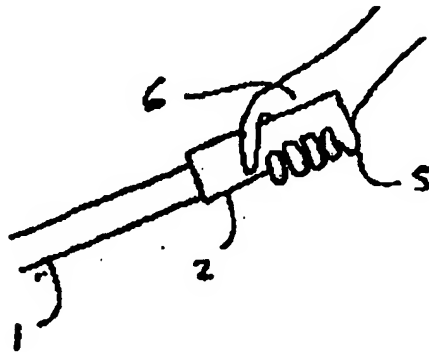


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(34) POIGNEUR DE BATTON DE HOCKEY
(50) HOCKEY STICK GRIP



(57) The invention discloses a gripping device for attachment to the top end of a hockey stick handle comprising a robust grip defining a longitudinal handle recess shaped to accommodate the top end of a hockey stick handle. At least one of the side surfaces of the grip comprises a rounded longitudinal portion to fit the palm of a player's hand. A knob could be incorporated to replace the common taped knob.



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HOCKEY STICK GRIP

5 The invention deals with the field of hockey sticks and in particular with a grip for the top end of a hockey stick.

BACKGROUND

10

Hockey stick handles are rectangular in cross-section with dimensions approximately .75 inches by 1.125 inches. They can be made of wood, metal, plastic and so forth, and the surface is generally smooth. This shape and smoothness allow
15 the handle to rotate in the player's hands when rotational torque is applied during use, as in shooting a puck. The handle must be gripped tightly to prevent this rotation. The rectangular shape of the handle can be uncomfortable, especially for occasional recreational players, as the corners
20 provide pressure points on the hands when the stick is tightly gripped.

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Tape is often wrapped around the handle for a short distance down from the top end. The tape is somewhat rough and improves the player's grip on the smooth handle.

5 In order to keep the handle from sliding out of the player's hand, and to improve stick control, tape is also often wrapped around the top end of the handle to form a knob. The knob also facilitates picking the stick up from the ice by somewhat raising the top end so that the stick may be grasped with the
10 fingers of the heavy gloves worn by hockey players.

The top end of a hockey stick handle can cause injury to other players during the rough and tumble of a hockey game. There are penalties for "butt-ending", ie. jabbing the top or butt
15 end of the stick into another player. The injuries can be severe, especially where the knob is placed somewhat down from the top end of the handle, leaving a portion of the bare handle exposed.

20 The comfort and control of hockey stick handles has previously been partially addressed in laid-open Canadian patent application number 2,106,178 by Scherz., where a hockey stick

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handle with a v-shaped bottom is disclosed, and in laid-open Canadian patent application number 2,145,010 by Thompson which discloses finger grooves in the bottom of the hockey stick handle.

5

A simple device for improving grip, comfort or safety, or a combination thereof, that could be added to existing hockey sticks, and one that could be removed and reused when a hockey stick broke, would be beneficial.

10

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a device for improving a player's grip on a hockey stick and improving the player's comfort when holding a hockey stick.

15

It is a further object of the present invention to provide such a device that reduces the risk of injury to hockey players.

20

It is a further object of the present invention to provide

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such a device that could be added to existing hockey stick handles and could be removed and reused.

The invention accomplishes these objectives providing a gripping device for attachment to the top end of a hockey stick handle, said hockey stick handle having a upper face, a lower face and two side faces, said gripping device comprising a resilient grip having a top end and a bottom end, an upper surface, a lower surface and two side surfaces, said grip defining a longitudinal handle recess from said bottom end of said grip to a point below said top end thereof, said handle recess shaped to accommodate said top end of a hockey stick handle, said grip having an axis extending longitudinally through the center thereof; wherein at least one of said side surfaces of the grip comprises a rounded longitudinal protrusion.

The grip provides a resilient comfortable grip for the top end of a hockey stick handle with a protrusion on one side to fit the palm of the player's hand. This protrusion essentially rounds out one side of the grip so that the palm is cupped somewhat, while the fingers could lie flat on the opposite

side surface.

The hockey stick handle is inserted in the handle recess in the grip and may attached with adhesive or the like. More
5 conveniently, the cross-section of the handle recess is slightly smaller than the cross-section of the hockey stick handle such that the grip stretches when installed on the hockey stick handle and is maintained thereon by tension in the resilient material of the grip. The handle recess could
10 have a substantially rectangular cross-section with an upper face, a lower face and two side faces wherein the upper and lower faces are slightly wider than the corresponding upper and lower faces of the hockey stick handle and wherein the side faces are slightly narrower than the corresponding side
15 faces of the hockey stick handle. The side faces would stretch during installation, and the tension therein would maintain the grip on the handle.

To facilitate installation, the grip could define an air
20 aperture in the top end thereof from the outside of the grip to the top end of the handle recess. The grip may then be conveniently installed by inserting a compressed air nozzle

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into the air aperture and blowing compressed air into the handle recess as the handle is inserted. The compressed air stretches the handle recess open to receive the handle. The grip may be removed by the same method for reuse if the stick is broken or worn out.

In addition to one protruding side for the palm, both of the side surfaces of the grip could comprise a rounded longitudinal protrusion, as could the upper and lower surfaces thereof. The upper, lower and side surfaces of the grip could form a substantially cylindrical outer dimension, which might be truncated such that one of the side surfaces is substantially a plane. The outer dimension could be somewhat deformed when the hockey stick handle is inserted into the handle recess, without negatively affecting the benefits of the grip. Any such combination may prove to be preferable to a particular player, and could be made available. A somewhat cylindrical outer dimension would remove the corners of the rectangular cross-section of the hockey stick handle which can cause discomfort. The grip also allows the player to use less pressure when holding the stick.

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The top end of the grip could also comprise a rounded protrusion extending axially outward from the grip. This resilient bump on the end of the hockey stick handle would reduce the risk of injury to other players from contact with
5 the rigid end of the handle.

There could be provided a projection extending radially outward from the top end of the grip to form a knob. The projection would replace the prior art taped knob, and could
10 extend radially outward in all directions from the grip or could extend radially outward only in the direction of the lower and side surfaces of the grip, thereby leaving the upper surface substantially linear from the bottom end of the grip to the top end thereof. This latter configuration would
15 allow the fingers to lie on the grip down from the knob while the palm of the hand could lie along the top of the grip and extend past the top of the grip, with no uncomfortable protrusion into the palm.

20 To improve the traction of the grip, raised longitudinal ridges along at least a portion of the length of the surface of the grip could be added. These ridges could further be

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utilized to make the grip more durable where a ridge is located adjacent to a corner of the handle recess, thereby effectively making the resilient material of the grip thicker at that corner.

5

The grip improves the player's comfort and also provides better puck control since less pressure is required when holding the hockey stick handle to prevent rotation when using the stick.

10

DESCRIPTION OF THE DRAWINGS

While the invention is claimed in the concluding portions hereof, preferred embodiments are provided in the accompanying detailed description which may be best understood in conjunction with the accompanying diagrams where like parts in each of the several diagrams are labeled with like numbers, and where:

20

Figure 1 is a side view of an embodiment of the invention;

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Figure 2 is an end view into the handle recess of the embodiment of Figure 1;

Figure 3 is an end view into the handle recess of an alternate embodiment;

Figure 4 is a side view showing a player's hand holding the embodiment of Figure 3 when installed on a hockey stick handle;

Figure 5 is a perspective view of the embodiment of Figure 1 installed on a hockey stick handle;

Figure 6 is an end view into the handle recess of an alternate embodiment;

DETAILED DESCRIPTION OF THE ILLUSTRATED EMBODIMENTS

Figure 1 shows one preferred embodiment of the invention, a gripping device for attachment to the top end of a hockey stick handle 1. The hockey stick handle 1 has a upper face

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1a, a lower face 1b and two side faces 1c and 1d. The gripping device comprises a resilient grip 2 having a top end 2x and a bottom end 2y, a top surface 2a, a bottom surface 2b and two side surfaces 2c and 2d. The grip 2 defines a longitudinal handle recess 3 extending from the bottom end 2y of the grip 2 to a point below the top end 2x thereof. The handle recess 3 is shaped to accommodate the top end of a hockey stick handle 1.

10 In Figures 1 - 5, the upper, lower and side surfaces 2a, 2b, 2c and 2d comprise a rounded longitudinal protrusion from the grip 2, thereby forming a substantially cylindrical outer dimension. Figure 6 illustrates an embodiment wherein only one side surface 2d comprises a rounded longitudinal protrusion, with the other surfaces essentially flat. In this embodiment the rounded side 2d would be installed on the hockey stick handle 1 such that the rounded side surface 2d was held in the palm of the player's hand.

20 The grip 2 could be attached to the top end of the hockey stick handle 1 by adhesive. More conveniently, the cross-section of the handle recess 3 is slightly smaller than the

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cross-section of the hockey stick handle 1 such that the grip 2 stretches when installed on the hockey stick handle 1 and is maintained thereon by tension in the resilient material of the grip 2.

5

In the illustrated embodiment, the handle recess 3 has a substantially rectangular cross-section with a upper face 3a, a lower face 3b and two side faces 3c and 3d. The upper and lower faces 3a and 3b are slightly wider than the corresponding upper and lower faces 1a and 1b of the hockey stick handle 1. The side faces 3c and 3d are slightly narrower than the corresponding side faces 1c and 1d of the hockey stick handle 1. This configuration maintains the grip 2 on the hockey stick handle 1 when installed. With this configuration, the top, bottom and side surfaces of the grip 2a, 2b, 2c and 2d form a substantially cylindrical outer dimension when not installed, which outer dimension is somewhat deformed when the hockey stick handle 1 is inserted into the handle recess 3.

15
20

The grip 2 also defines an air aperture 4 in the top end 2x thereof from the outside of the grip 1 to the top end of the

handle recess 3. The grip 2 may then be conveniently installed by inserting a compressed air nozzle into the air aperture 3 and blowing compressed air into the handle recess 3 as the hockey stick handle 1 is inserted. The compressed air stretches the handle recess 3 open to receive the handle 1. The grip 2 may be removed by the same method.

The top end 2x of the grip 2 comprises a rounded protruding bump 9 extending axially from the grip 2. The bump 9 provides a resilient cushioned end to the hockey stick handle 1 which reduces the risk of injury to other players.

A projection extends radially outward from the top end 2x of the grip 2 to form a knob 5. The knob 5 replaces the taped knob in the prior art. The knob 5 may extend radially outward in all directions from the grip 2 as shown in Figure 2. Alternatively the knob 5 could only extend outward in the direction of the bottom and side surfaces 2b, 2c and 2d of the grip 2 and leaving the top surface 2a of the grip 2 substantially linear from the bottom end 2y of the grip 2 to the top end 2x thereof, as illustrated in Figures 3 and 4. This alternate configuration allows the palm of the player's

hand 6 to overlap the top end 2x of the grip 2 without encountering the knob 5, improving the comfort of the player.

Figure 6 illustrates an embodiment with no knob.

5

To improve the traction of the player's hand on the grip 2, the illustrated embodiment includes raised longitudinal ridges 7 along the length of the surface of the grip 2. One such ridge is located adjacent to each corner 8 of the handle recess 3, thereby effectively making the resilient material of the grip 2 thicker at that corner. As this is necessarily the thinnest section of material between the handle recess 3 and the surface of the grip 2, these ridges 7 add material where it is most desirable in order to improve the durability of the grip 2.

10
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The grip 2 may be made of any suitable resilient material that may be conveniently molded into the required shape, including any protrusions.

20

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous changes

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and modifications will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all such suitable changes or modifications in structure or operation which may be resorted to are intended to fall within the scope of the claimed invention.

CLAIMS

I claim:

- 5 1. A gripping device for attachment to the top end of a
 hockey stick handle, said hockey stick handle having a
 upper face, a lower face and two side faces, said
 gripping device comprising a resilient grip having a
 top end and a bottom end, an upper surface, a lower
10 surface and two side surfaces, said grip defining a
 longitudinal handle recess from said bottom end of said
 grip to a point below said top end thereof, said handle
 recess shaped to accommodate said top end of a hockey
 stick handle, said grip having an axis extending
15 longitudinally through the center thereof; wherein at
 least one of said side surfaces comprises a rounded
 longitudinal protrusion.

 - 20 2. The invention of Claim 1 wherein said grip is attached
 to said top end of the hockey stick handle by adhesive.
-

3. The invention of Claim 1 wherein the cross-section of said handle recess is slightly smaller than the cross-section of said hockey stick handle such that said grip stretches when installed on said hockey stick handle and is maintained thereon by tension in the resilient material of said grip.
4. The invention of Claim 3 further comprising an air aperture defined by said grip in the top end thereof from the outside of said grip to the top end of said handle recess.
5. The invention of any of Claims 4 wherein said handle recess has a substantially rectangular cross-section with a upper face, a lower face and two side faces and wherein said upper and lower faces are slightly wider than the corresponding upper and lower faces of said hockey stick handle and wherein said side faces are slightly narrower than the corresponding side faces of said hockey stick handle.
-

- 5 6. The invention of any of Claims 1 - 5 wherein both said
 side surfaces of the grip comprise a rounded
 longitudinal protrusion.
- 10 7. The invention of any of Claims 1 - 6 wherein said upper
 and lower surfaces of the grip comprise a rounded
 longitudinal protrusion.
- 15 8. The invention of any of Claims 1 - 7 wherein said
 upper, lower and side surfaces of the grip form a
 substantially cylindrical outer dimension.
- 20 9. The invention of Claim 8 wherein said cylindrical outer
 dimension is truncated by such that one of said side
 surfaces is substantially a plane.
-

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10. The invention of Claim 8 wherein said outer dimension is deformed when said hockey stick handle is inserted into said handle recess.
- 5
11. The invention of any of Claims 1 -10 wherein said top end of the grip comprises a rounded protrusion extending axially from said grip.
- 10
12. The invention of any of Claims 1 - 11 further comprising a projection extending radially outward from said top end of the grip to form a knob.
- 15
13. The invention of Claim 12 wherein said projection extends radially outward in the direction of said lower and side surfaces of the grip and wherein said upper surface of the grip is substantially linear from said bottom end of the grip to said top end thereof.
- 20
-

14. The invention of Claim 12 wherein said projection extends radially outward in all directions from said grip.

5

15. The invention of any of Claims 1 - 14 further including raised longitudinal ridges along at least a portion of the length of the surface of said grip.

10

16. The invention of Claim 15 wherein at least one said ridge is located adjacent to a corner of said handle recess, thereby effectively making the resilient material of said grip thicker at that corner.

15

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ABSTRACT

The invention discloses a gripping device for attachment to the top end of a hockey stick handle comprising a resilient grip defining a longitudinal handle recess shaped to accommodate the top end of a hockey stick handle. At least one of the side surfaces of the grip comprises a rounded longitudinal protrusion to fit the palm of a player's hand. A knob could be incorporated to replace the common taped knob.

FIGURE 1:

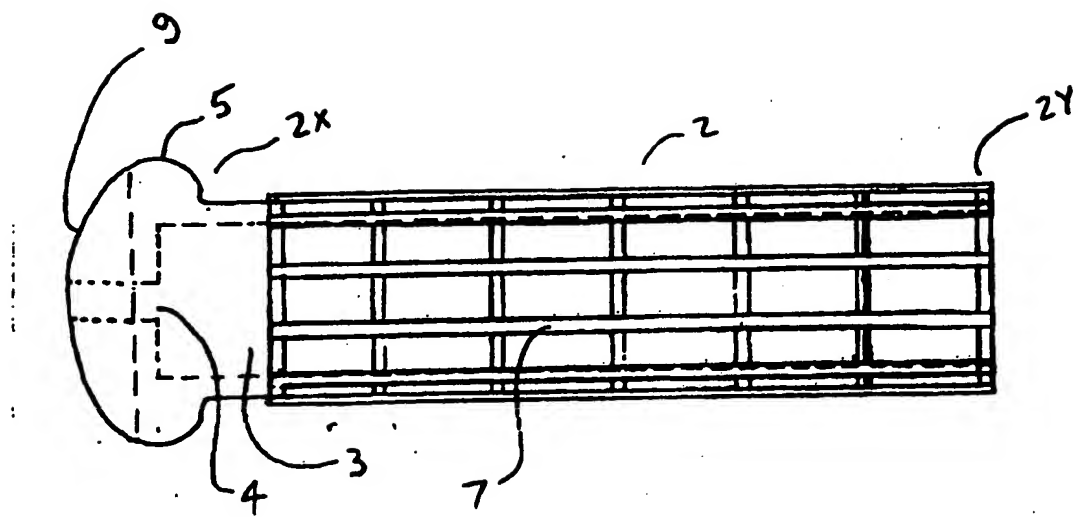


FIGURE 2:

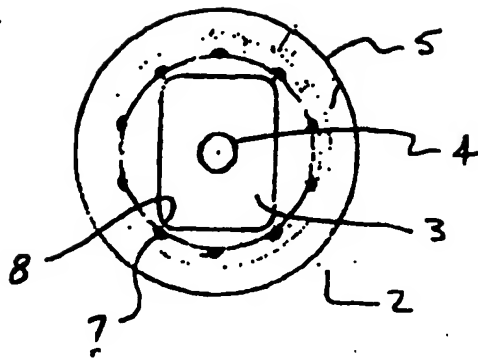


FIGURE 3:

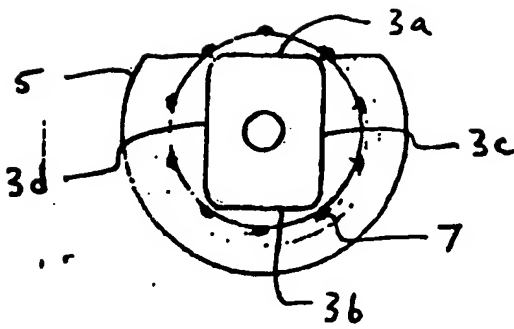


FIGURE 4:

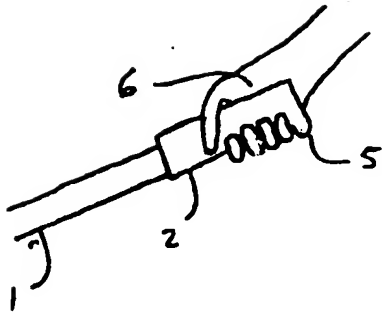


FIGURE 5:

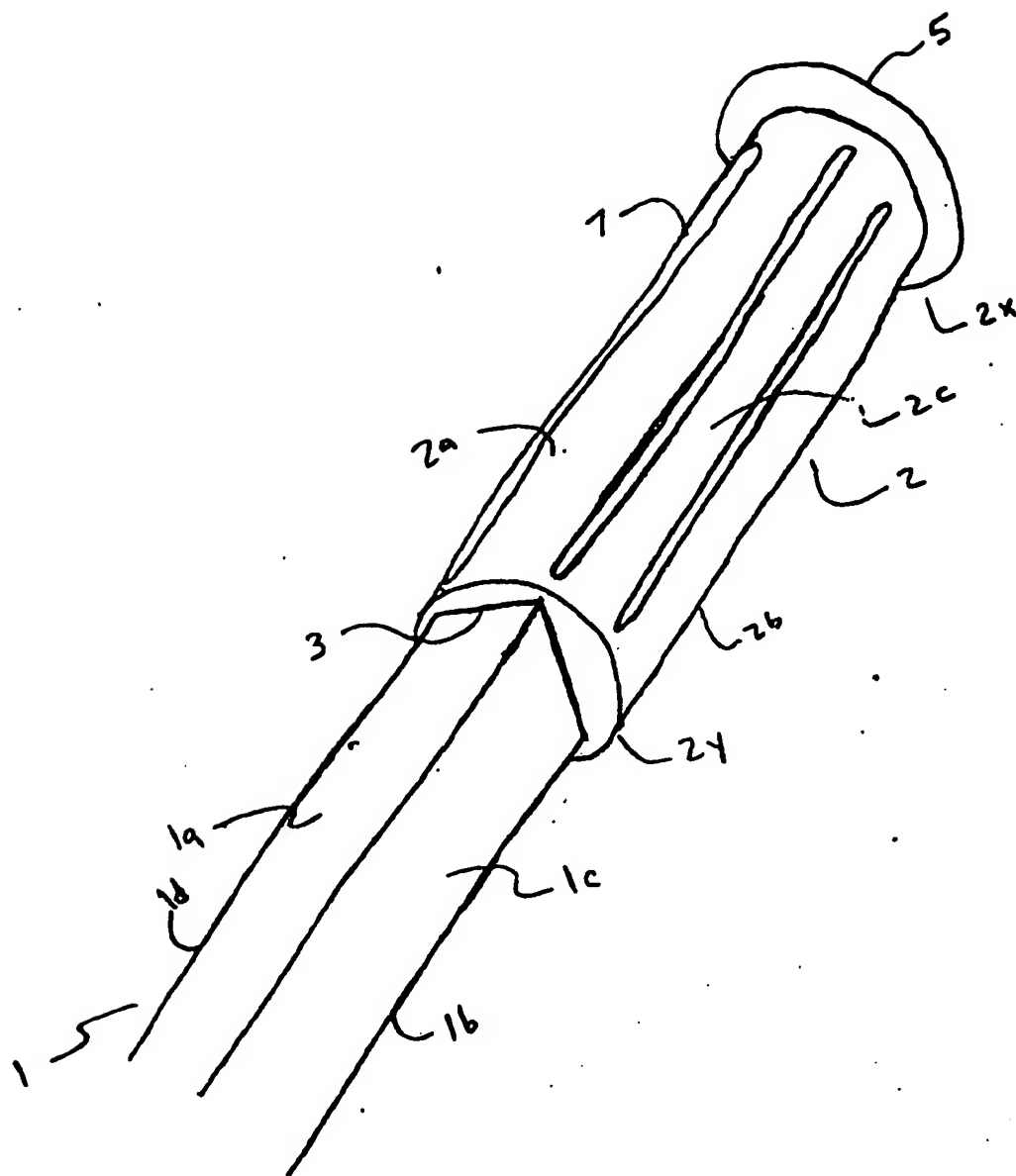
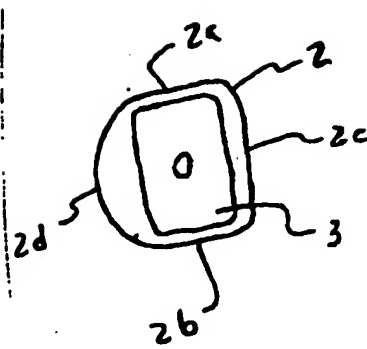


FIGURE 6:



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